Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of simulating or designing a communication network supporting communication between a plurality of communication units, wherein the method comprises ~~the step of~~:

employing a simulation tool to resolve a mathematical formula relating to an operation of the communication network; and

varying an electrically variable input signal by a plurality of interconnected electronic components in a hardware platform of the simulation tool (300) such that an output signal of the interconnected electronic components has resolved ~~resolving~~ at least one iterative mathematical formula in hardware without employing multiple iteration(s) ~~within a hardware platform of the simulation tool~~.

2. (Currently Amended) The method of simulating or designing a communication network according to claim 1, wherein the simulation tool further comprises a software platform, operably coupled to the hardware platform, and utilizes a series of mathematical formula at least one of which has no closed form solution, the method further comprising the step of:

resolving, by the plurality of interconnected electronic components ~~hardware platform~~, the at least one mathematical formula that has no closed form solution.

3. (Currently Amended) The method of simulating or designing a communication network according to claim 2, wherein the method further comprises ~~the step of~~:

providing, by the software platform, at least one input signals to the hardware platform, relating to the at least one mathematical formula to be resolved.

4. (Currently Amended) The method of simulating or designing a communication network according to or claim 3, wherein the method further comprises the step of:

configuring the hardware platform, by the software platform, by setting at least one parameters from a group of: of

the mathematical formula to be resolved, including at least one of

at least one path-loss parameters and a parameter in the equation:

at least one from a group of:

an energy per bit over noise and interference spectral density, a chip rate for a code division multiple access, CDMA, system, a data rate of a transmission from a base station to a mobile station.

5. (Currently Amended) The method of simulating or designing a communication network according to claim 4, wherein the at least one input signals are in the form of an electrically variable signal, for example a voltage level, where a level of the electrically variable signal corresponds to at least one of a transmit and receive power level of a communication unit operating in the communication network where the power level is one from a group of: a transmit power level, and a receive power level.

6. (Currently Amended) The method of simulating or designing a communication network according to claim 5, wherein the at least one mathematical formula relates to an air-interface of a wireless communication network having communication units that are capable of transmitting at differing radio frequency transmit powers, wherein resolving at least one iterative mathematical formula comprises the step of converging a number of the transmit power levels or receive power levelspowers.

7. (Currently Amended) The method of simulating or designing a communication network according to claim 1, wherein the method further comprises the step of:

adapting an operational communication network~~, for example in substantially in a real-time manner,~~ in response to at least one output provided by the hardware platform.

8. (Currently Amended) The method of simulating or designing a communication network according to claim 7, wherein the method further comprises~~ the step of~~:

simulating a variation of a location of communication units as a function of time by adapting at least one input signal levels.

9. (Currently Amended) The method of simulating or designing a communication network according to claim 8, wherein the at least one input signal level~~s~~ relate~~s~~ to at least one from a group of:

(i) A geographical area to be covered by the communication network;

(ii) A number of subscriber units for which a simulation is to be performed;

(iii) An operational status of at least one subscriber unit~~s, for example whether a subscriber unit is mobile or static~~;

(iv) A power emission level from at least one from a group of: a subscriber unit ~~and/or~~and a base station; ~~or~~

(v) An operational setting of at least one base station

(vi) Whether a subscriber unit is at least one from a group of: mobile, static.

10. (Currently Amended) The method of simulating or designing a communication network according to claim 1, wherein the method is applied to at least one from a group of a wireless code division multiple access CDMA communication network, time division multiple access TDMA communication network, frequency

division multiple access FDMA communication network , ~~or~~ and orthogonal frequency division multiple access OFDMA communication network.

11. (Currently Amended) The method of simulating or designing a communication network according to claim 1, wherein the method is applied to at least one from a group of:

(i) A static simulation of a wireless communication network;

(ii) A dynamic simulation of a wireless communication network;

(iii) An off-line optimization of a wireless communication network; ~~or~~ and

(iv) ~~At least one of~~ an on-line ~~and a substantially near-real-time~~ optimization of a wireless communication network.

12. (Canceled)

13. (Canceled)

14. (Previously Presented) The method of simulating or designing a communication network according to claim 1, and further comprising a storage medium storing processor-implementable instructions for controlling a processor to carry out the method.

15. (Canceled)

16. (Currently Amended) ~~A~~ An apparatus comprising a simulation tool for simulating or designing a communication network supporting communication between a plurality of communication units, the apparatus comprising a software platform wherein the simulation tool comprises:

a hardware platform operably coupled to the software platform comprising a plurality of interconnected electronic components that are arranged to vary an electrically

variable input signal to produce an output signal that resolves ~~such that the hardware platform is configured to resolve~~ at least one iterative mathematical formula relating to an operation of the communication network without employing multiple iterations.

17. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 16, wherein the plurality of electronic components of the hardware platform is configured to resolve at least one mathematical formula that has no closed form solution.

18. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 17, wherein the simulation tool comprises an interface between the software platform and the hardware platform and adapted to enable the software platform to provide at least one input signals to the hardware platform, relating to the at least one iterative mathematical formula to be resolved.

19. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 18, wherein the software platform is capable of configuring the hardware platform by setting from a group of:

at least one parameter~~s~~ of the mathematical formula to be resolved,

at least ~~for example,~~ one ~~or more~~ path-loss parameter~~s~~ at least one from a group of:

an energy per bit over noise and interference spectral density, a chip rate for a code division multiple access, CDMA, system, a data rate of a transmission from a base station to a mobile station.~~and/or a parameter in equation:~~

20. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 19, wherein the ~~at least one input signals is in the form of an electrically variable signal, for example a voltage level, where a~~ level of the electrically variable signal corresponds to ~~at least one of a transmit and receive~~a power level of a communication unit operating in the

communication network), where the power level is one from a group of: a transmit power level, a receive power level.

21. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 20, wherein the software platform adapts at least one input signal in order to simulate a variation of a location of at least one communication unit as a function of time.

22. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 21, wherein the at least one input signal level relates to ~~any~~ at least one from a group of:

(i) A geographical area to be covered by the communication network;

(ii) A number of subscriber units for which the simulation is to be performed;

(iii) An operational status of at least one of the subscriber units~~, for example whether a subscriber unit is mobile or static~~;

(iv) A power emission from at least one from a group of: ~~of a~~ subscriber unit and a base station; and

(v) An operational setting of at least one base station

(vi) Whether a subscriber unit is at least one from a group of: mobile, static.

23. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 22, wherein the hardware platform comprises a plurality of ~~substantially~~ only two electronic components: adder functions and multiplier functions.

24. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 23, wherein the interface comprises a plurality of sample and hold functions and decoder logic building blocks.

25. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 24, wherein the hardware platform is configured to resolve an equation of a form:

$$I_m = \sum_{n=1, n\neq s}^{Nbs} P_n \times \frac{1}{L_n} + (P_s - Pm) \times \frac{1}{L_s} \times a$$

26. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 24, wherein the hardware platform is configured to resolve an equation of a form:

$$I_m = \sum_{n=1, n\neq s}^{N_m} P_m \times \frac{1}{L_n} + (P_s - P_{m\_to\_BS}) \times \frac{1}{L_s}$$

27. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 26, wherein the simulation tool is located in an Operations and Management Centre of a wireless communication network.

28. (Currently Amended) The apparatus ~~simulation tool~~ according to claim 27, wherein the simulation tool is arranged to adapt an operational communication network in substantially in a real-time manner in response to an output provided by the hardware platform.

29. (Currently Amended) A cellular communication system comprising an apparatus comprising a~~The~~ simulation tool ~~according to claim 16, and further comprising a cellular communication system adapted to employ the simulation tool~~ for simulating or designing a communication network (200) supporting communication between a plurality of communication units, the apparatus comprising a software platform (310), wherein the simulation tool (300) comprises:

a hardware platform (320) operably coupled to the software platform (310) such that the hardware platform (320) is configured to resolve at least one iterative mathematical formula relating to an operation of the communication network (200).

30 – 32 (Canceled)